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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,699	03/19/2004	Tzong-Hsinang Lan	ACMP0042USA	2698

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NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)  
P.O. BOX 506  
MERRIFIELD, VA 22116

EXAMINER
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NATALINI, JEFF WILLIAM

ART UNIT	PAPER NUMBER
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2858

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/708,699

Applicant(s)

LAN ET AL.

Examiner

Jeff Natalini

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. This application is in condition for allowance except for the following formal matters:

See objections to drawings, specification, and claims below.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. In order for the public to be able to understand the invention as a whole, figure 2 showing the voltage test circuit claimed in claim 1 and figure 5 showing the current test circuit that together make up a power source test instrument should be combined in one drawing to represent all that is claimed in claim 1. Figure 1 shows the power test instrument, but it lacks the details that are claimed in claim 1. No new matter should be entered.

Also in the description of figure 1 in paragraph 16 of the specification, the voltage test circuit 12 is depicted as OPTDA2030 (also at least in paragraph 17), but in the picture it is labeled TDA2030, this inconsistency needs to be corrected (both should be labeled one or the other). This same inconsistency exists (in at least paragraphs 16 and 20) when describing the current test circuit 14, described as OPMC1741C, but labeled as MC1741C.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is non-existent. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

4. The disclosure is objected to because of the following informalities:
- Near the end of paragraph [16] it states “fusing the power management circuit 16 with a fuse 10.” This is referring to figure 1, and clearly the fuse is represented by the numeral 18. So this is a simple typo.

Appropriate correction is required.

***Allowable Subject Matter***

5. In regard to claim 1, the prior art does not teach or render obvious the power source test instrument comprising a first set of relays with a first terminal connected to a negative input terminal of the first operational amplifier, a second terminal connected to an output terminal of the first operational amplifier, and a third terminal grounded via a first resistor; a second set of relays with a first terminal connected to a third terminal of the first set of relays, a second terminal grounded, and a third terminal; and a third set of relays with a first terminal connected to an output terminal of the first operational amplifier, a second terminal connected to a first output terminal of the voltage test circuit, a third terminal connected to the third terminal of the second set of relays, and a fourth terminal connected to a second output terminal of the voltage test circuit; wherein the first set of relays can be switched to turn on the first terminal and the second terminal or to turn on the first terminal and the third terminal, the second set of relays can be switched to turn on the first terminal and the third terminal or to turn on the second terminal and the third terminal, the third set of relays can be switched to turn on the first terminal and the second terminal and to turn on the third terminal and the fourth

terminal or be switched to turn on the first terminal and the fourth terminal and to turn on the second terminal and the third terminal and combination as claimed.

The closest prior art is as follows:

Bertness et al. (6323650) teaches an electronic battery tester that in figure 3 shows a differential amplifier with equivalent ratios between the inputs of an operational amplifier and has a resistance between the two input terminals of the differential amplifier.

Yudahira et al. (6664761) teaches a battery voltage detection device that contains a differential amplifier into the inputs of an operational amplifier.

Tedd et al. (4570116) teaches an operational amplifier in a voltage adjuster circuit (fig 2) that has a multitude of switches (relays) connected to the negative input terminal of the operational amplifier and will be connected to the output of the operational amplifier that also contains switches. Tedd et al. lacks at least wherein three relays are formed and how the first, second, and third relays are connected together by a switch, and where the first and second relays can be connected to ground.

Butts (6054864) teaches a capacitor checker that has a multitude of switches (fig 4) between the input and output terminals of an operational amplifier, that can connect the input and output terminals in a variety of ways. Butts lacks at least wherein three relays are formed and how the first, second, and third relays are connected together by a switch, and where the first and second relays can be connected to ground.

In regard to claims 2-11, are allowable because they depend from allowable claim 1.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Natalini whose telephone number is 571-272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeff Natalini



**ANJAN DEB**  
**PRIMARY EXAMINER**